

ROADWAY, STORM DRAIN, SEWER, WATER, & ESC

FOR LILYVALE

BALTIMORE HUNDRED
SUSSEX COUNTY, DELAWARE

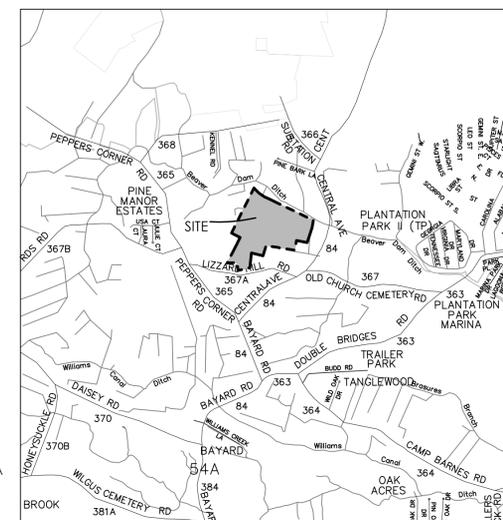
FOR
K. HOVNANIAN DELAWARE DIVISION, INC.



LEGEND		EXISTING	PROPOSED
PROPERTY LINE	---	---	---
EASEMENT LINE	---	---	---
SETBACK LINE	---	---	---
CONCRETE MONUMENT FOUND	CMF □		N/A
IRON PIPE FOUND	IPF ●		N/A
BENCH MARK	▲ ELEV.		N/A
SPOT ELEV. LABEL	x 19.25		19.25
MAJOR CONTOUR	-----10-----	-----10-----	10
MINOR CONTOUR	-----7-----	-----7-----	7
ROAD CENTERLINE	---	---	---
EDGE OF CONCRETE	---	---	---
EDGE OF PAVEMENT	---	---	---
EDGE OF GRAVEL	---	---	N/A
PAINT STRIPE	---	---	---
CURB	---	---	---
PAVEMENT HATCH	▨	▨	▨
CONCRETE HATCH	▩	▩	▩
BUILDING OUTLINE	---	---	---
SIDEWALK	---	---	---
SIDEWALK HATCH	▨	▨	▨
FENCE LINE	x		N/A
SIGN	⊕	⊕	⊕
EDGE OF WETLAND	---W---	---W---	N/A
FLOODPLAIN	---	---	N/A
STORM MANHOLE	⊙	⊙	⊙
CURB INLET	⊕	⊕	⊕
YARD INLET	⊕	⊕	⊕
STORM PIPE	---	---	---
RIP RAP	▨	▨	▨
SANITARY MANHOLE	⊙	⊙	⊙
SANITARY CLEANOUT	○	○	○
SANITARY PIPE	SS	SS	SS
SANITARY FORCEMAIN	---	---	---
WATER VALVE	⊕	⊕	⊕
WATER PIPE	W	W	W
FIRE HYDRANT	⊕	⊕	⊕
OVERHEAD ELECTRIC	E		N/A
UNDERGROUND ELECTRIC	---	---	N/A
UNDERGROUND TELECOMMUNICATIONS	TC		N/A
UTILITY POLE	⊕		N/A
LIGHT POLE	⊕		N/A
DECIDUOUS TREE	⊕		N/A
CONIFEROUS TREE	⊕		N/A
TREE LINE	---	---	---
EDGE OF WATER/POND	N/A	---	---
SWALE CL. w/ FLOW DIRECTION	N/A	---	---
RESOURCE PROTECTION ZONE	N/A	---	---

SITE DATA:

- OWNER: WAYNE E. & GARY O. HICKMAN & CINDA S. RICKARDS, TRUSTEES
34434 CENTRAL AVENUE
FRANKFORD, DE 19945
- DEVELOPER: K. HOVNANIAN AT LILYVALE, LLC
2499 SOUTH DUPONT BLVD., SUITE 6
SMYRNA, DE 19977
CONTACT: MIKE IRONS
- ENGINEER: SOLUTIONS IPEM, LLC
303 NORTH BEDFORD STREET
GEORGETOWN, DE 19947
302.297.9215
CONTACT: JIM ERIKSEN, PE
- TAX MAP 134-19.00, PARCELS 13.00 & 13.04
- EXISTING ZONING: AR-1
- PROPOSED ZONING: MEDIUM RESIDENTIAL (MR) WITH A CONDITIONAL USE
- PROPERTY SETBACKS:
FRONT YARD = 40'
REAR YARD = 10'
SIDE YARD = 10'
CORNER SIDE YARD = 15'
- MINIMUM BUILDING SEPARATION = 40'
- MAXIMUM BUILDING HEIGHT: 42'
- TOTAL AREA = 51.23 AC.±
TOTAL NUMBER OF UNITS = 174 UNITS
DENSITY = 174/51.23 = 3.40 UNITS PER ACRE
- TYPE OF UNIT TOTALS
DUPLICES (MAX. 3 BEDROOMS) = 2
TOWNHOUSES (MAX. 3 BEDROOMS) = 172
- NET DEVELOPMENT AREA
51.23 AC. - 6.121 (R/W AREA) = 45.109 AC.
DENSITY = 174/45.109 = 2.86 UNITS PER ACRE
- BOUNDARY AND TOPOGRAPHY AS SHOWN HEREON ARE AS PROVIDED BY SOLUTIONS IPEM LLC
- FLOOD ZONE:
PROPERTY IS LOCATED IN ZONE AE, EL 4 - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. BASE FLOOD ELEVATION DETERMINED; ZONE X (SHADED) - AREAS OF 0.2% ANNUAL CHANCE FLOOD; AND ZONE X (UNSHADED) - AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FIRM MAP NUMBER 10005C0495K & 10005C0513K. MAPS REVISED MARCH 16, 2015
- WATER SUPPLY:
TIDEWATER UTILITIES
- SANITARY SEWER:
SUSSEX COUNTY



VICINITY MAP
SCALE: 1" = 2,000'

PRELIMINARY SITE PLAN INDEX

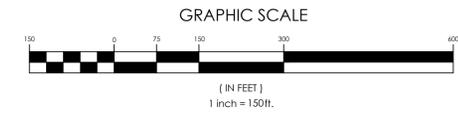
- 1 - CONDITIONAL USE COVER SHEET
- 2 - CONDITIONS OF APPROVAL
- 3 - EXISTING CONDITIONS PLAN
- 4 - CONDITIONAL USE PLAN
- 5 - GRADING PLAN

DELDOT PLAN INDEX

- 1 - TITLE
- 2 - LEGEND
- 3 - CONSTRUCTION AND M.O.T. NOTES
- 4 - 6 - TYPICAL SECTIONS
- 7 - HORIZONTAL AND VERTICAL CONTROL
- 8 - CONSTRUCTION PLAN
- 9 - GRADING PLAN
- 10 - PROFILES & CONSTRUCTION DETAILS
- 11 - SIGNING & STRIPING PLAN
- 12 - 18 - CENTRAL AVENUE CROSS SECTIONS
- 19 - SUPPLEMENTAL CROSS SECTIONS
- 20 - M.O.T. AND EROSION CONTROL PLANS

CONSTRUCTION PLANS INDEX

- | | | | |
|--|--------------------------------|---|--|
| 1 - COVER | 18 - DETAILS 1 | 31 - FIRE MARSHAL PLAN | 47 - PEDESTRIAN BRIDGE DETAILS |
| 2 - GENERAL NOTES | 19 - DETAILS 2 | 32 - FIREWALL DETAILS | 48 - POST CONSTRUCTION SITE SWM |
| 3 - EXISTING CONDITIONS | 20 - DETAILS 3 | 33 - WATER PLAN A | 49 - 54 - EROSION AND SEDIMENT CONTROL NOTES AND DETAILS |
| 4 - INDEX | 21 - SANITARY SEWER INDEX | 34 - WATER PLAN B | 55 - POST-CONSTRUCTION SWM PLAN - WET POND 1 |
| 5 - ROAD AND STORM DRAIN PLAN A | 22 - SANITARY SEWER PLAN A | 35 - WATER PROFILES 1 | 56 - POST-CONSTRUCTION SWM PLAN - WET POND 2 |
| 6 - ROAD AND STORM DRAIN PLAN B | 23 - SANITARY SEWER PLAN B | 36 - WATER PROFILES 2 | 57 - POST-CONSTRUCTION SWM PLAN - WET POND 3 |
| 7 - DETAILED INTERSECTION GRADING 1 | 24 - SANITARY SEWER PROFILES 1 | 37 - 40 - WATER DETAILS AND TUI NOTES | 58 - POST-CONSTRUCTION SWM PLAN - WET POND 4 |
| 8 - DETAILED INTERSECTION GRADING 2 | 25 - SANITARY SEWER PROFILES 2 | 41 - EROSION & SEDIMENT CONTROL COVER | 59 - POST-CONSTRUCTION SWM PLAN - WET POND 5 |
| 9 - ROAD PROFILES 1 | 26 - SANITARY SEWER DETAILS 1 | 42 - PRE CONSTRUCTION SWM PLAN | 60 - PHASING PLAN |
| 10 - ROAD PROFILES 2 | 27 - SANITARY SEWER DETAILS 2 | 43 - CONSTRUCTION SITE SWM PLAN | E-1 - E-12 - PUMP STATION ELECTRICAL PLANS |
| 11-14 - STORMDRAIN PROFILES | 28 - PUMP STATION SITE PLAN | 44 - STORMWATER AND EARTHWORK PHASING PLAN | |
| 15 - STORM DRAIN STRUCTURE AND PIPE CHARTS | 29 - PUMP STATION DETAILS 1 | 45 - STORM DRAIN WETLAND CONSTRUCTION DETAILS | |
| 16 - BULK GRADING PLAN A | 30 - PUMP STATION DETAILS 2 | 46 - 3 SIDED CULVERT DETAILS | |
| 17 - BULK GRADING PLAN B | | | |



WETLAND STATEMENT	
I, Edward M. Launay, PWS, STATES THAT THE BOUNDARIES OF WATERS OF THE UNITED STATES INCLUDING WETLANDS SUBJECT TO THE CORPS OF ENGINEERS REGULATORY PROGRAM DELINEATED UPON THIS PLAN HAVE BEEN DETERMINED USING MY PROFESSIONAL JUDGMENT IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, ATLANTIC GULF COAST REGIONAL SUPPLEMENT, REGULATIONS AND SUPPLEMENTAL GUIDANCE (33 CFR 328.3(a)(8), Waters of the U.S. Definition/CECW-OR, 10-7-1991, Questions and Answers on the 1987 COE Manual/CECW-OR, 9-26-1990, RGL 90-7/CECW-OR, 3-6-1992, Clarification and Interpretation of the 1987 Manual). THIS DELINEATION HAS NOT BEEN CONDUCTED FOR USDA PROGRAM OR AGRICULTURAL PURPOSES.	
EDWARD M. LAUNAY, PWS No. 875 SOCIETY OF WETLANDS SCIENTISTS CORPS OF ENGINEERS, CERTIFIED WETLAND DELINEATOR WDCP93MD05100368	DATE
ENGINEER'S CERTIFICATION	
I HEREBY CERTIFY THAT THESE DRAWINGS HAVE BEEN PREPARED UNDER MY SUPERVISION.	
JIM ERIKSEN, PE	DATE
DEVELOPER'S CERTIFICATION	
K. HOVNANIAN AT LILYVALE, HEREBY CERTIFIES THAT THESE DRAWINGS HAVE BEEN APPROVED.	
MIKE IRONS	DATE
APPROVED, SUSSEX COUNTY ENGINEER	AGREEMENT #1192
NAME	DATE

solutions
IPEM, LLC
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Georgetown, DE 19947
T. 302.297.9215

3033 Manthill Hill Road
Salisbury, MD 21804
T. 410.572.8833

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JAMES A. ERIKSEN
LICENSE
Professional Engineer
Seal

Date: 2/26/26

REVISIONS		DESCRIPTION	REVISIONS PER SCD COMMENTS	REVISIONS PER TUI COMMENTS	REVISIONS PER SCE COMMENTS	REVISIONS PER TUI COMMENTS	REVISIONS PER FIRE MARSHAL COMMENTS	REVISIONS PER SCD COMMENTS
NO.	DATE							
4	1/21/26							
5	1/23/26							
6	2/4/26							
7	2/19/26							
8	2/13/26							
9	2/26/26							

COVER for
LILYVALE
SUSSEX COUNTY, DELAWARE
Prepared for: K. HOVNANIAN AT LILYVALE, LLC

Date:	7/17/2025
Job Number:	G25008
Scale:	AS NOTED
Drawn By:	JPR
Designed By:	JPR
Approved By:	JRE

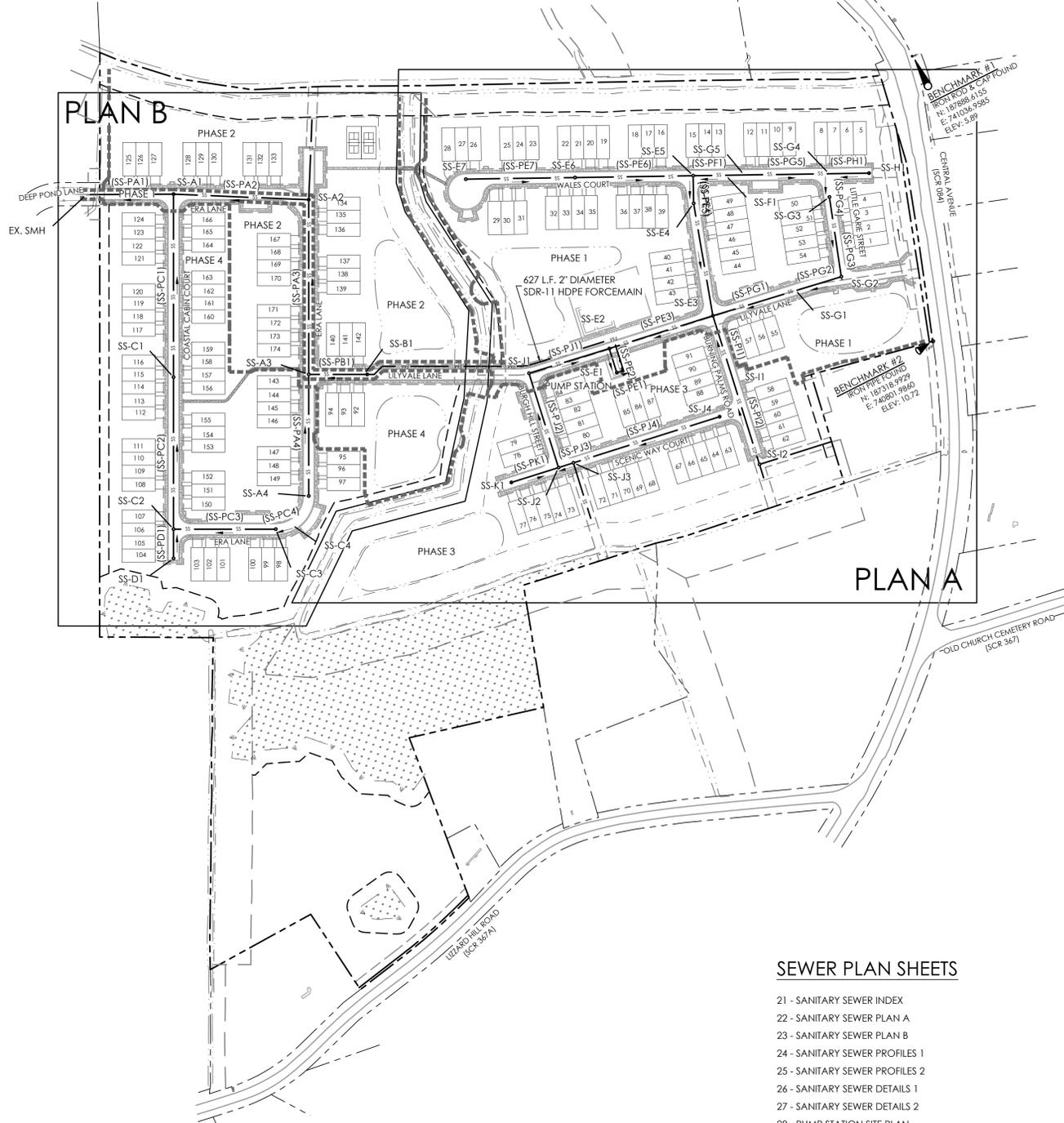
Sheet No.: 1

File Name: G25008-Cover

SANITARY SEWER STRUCTURE CHART					
NAME	RIM ELEV (FT)	INVERT-IN ELEV (FT) (1)	INVERT-IN ELEV (FT) (2)	INVERT-IN ELEV (FT) (3)	INVERT-OUT ELEV (FT)
EX. SMH	10.73	-1.40	N/A	N/A	N/A
PUMP STATION	11.64	1.21	N/A	N/A	6.00
SS-A1	11.48	1.72	1.72	N/A	1.67
SS-A2	10.62	3.58	3.58	N/A	3.53
SS-A3	11.00	4.76	4.76	N/A	4.71
SS-A4	10.81	N/A	N/A	N/A	5.81
SS-B1	10.30	5.35	N/A	N/A	5.30
SS-C1	10.22	2.95	N/A	N/A	2.90
SS-C2	11.37	3.98	3.98	N/A	3.93
SS-C3	10.99	6.04	N/A	N/A	5.99
SS-D1	11.69	6.74	N/A	N/A	6.69
SS-E1	11.22	1.30	N/A	N/A	1.25
SS-E2	10.34	1.59	1.59	N/A	1.42
SS-E3	10.73	2.35	2.35	2.35	2.30
SS-E4	10.21	3.14	N/A	N/A	3.09
SS-E5	10.58	3.37	3.37	N/A	3.32
SS-E6	10.20	4.18	N/A	N/A	4.13
SS-E7	10.45	5.18	N/A	N/A	5.13
SS-G1	9.82	3.27	N/A	N/A	3.22
SS-G2	9.90	N/A	N/A	N/A	4.90
SS-H1	10.58	N/A	N/A	N/A	4.51
SS-I1	9.47	3.41	3.41	N/A	3.36
SS-J1	10.16	3.08	N/A	N/A	3.03
SS-J2	10.90	3.77	N/A	N/A	3.72
SS-J3	10.75	3.92	3.92	N/A	3.87
SS-J4	10.25	N/A	N/A	N/A	5.25
SS-K1	10.42	N/A	N/A	N/A	5.42

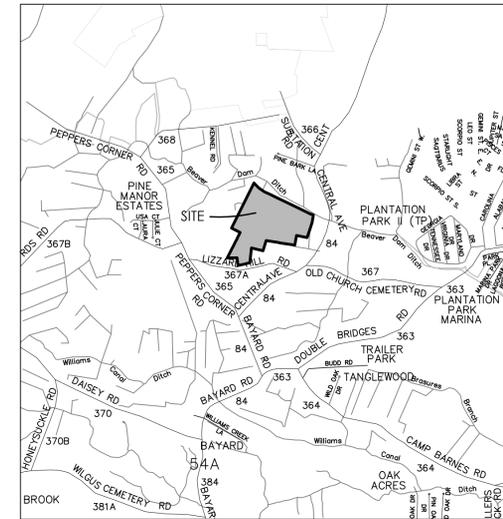
60" MANHOLE

SANITARY SEWER PIPE TABLE						
NAME	SIZE (IN)	MATERIAL	LENGTH (FT)	SLOPE (%)	UP INVERT (FT)	DOWN INVERT (FT)
SS-PA1	8	PVC - SDR 35	188.51	1.63	1.67	-1.40
SS-PA2	8	PVC - SDR 35	293.25	0.62	3.53	1.72
SS-PA3	8	PVC - SDR 35	376.64	0.30	4.71	3.38
SS-PA4	8	PVC - SDR 35	262.35	0.40	5.81	4.76
SS-PB1	8	PVC - SDR 35	126.45	0.43	5.30	4.76
SS-PC1	8	PVC - SDR 35	394.77	0.30	2.90	1.72
SS-PC2	8	PVC - SDR 35	327.76	0.30	3.98	2.95
SS-PC3	8	PVC - SDR 35	221.50	0.91	5.99	3.98
SS-PD1	8	PVC - SDR 35	63.01	4.30	6.69	3.98
SS-PE1	10	PVC - SDR 35	14.00	0.29	1.25	1.21
SS-PE2	10	PVC - SDR 35	54.50	0.23	1.42	1.30
SS-PE3	8	PVC - SDR 35	235.38	0.30	2.30	1.59
SS-PE4	8	PVC - SDR 35	245.90	0.30	3.09	2.35
SS-PE5	8	PVC - SDR 35	59.61	0.30	3.32	3.14
SS-PE6	8	PVC - SDR 35	255.92	0.30	4.13	3.37
SS-PE7	8	PVC - SDR 35	236.73	0.40	5.13	4.18
SS-PG1	8	PVC - SDR 35	290.68	0.30	3.22	2.35
SS-PG2	8	PVC - SDR 35	173.65	0.94	4.90	3.27
SS-PH1	8	PVC - SDR 35	381.07	0.30	4.51	3.37
SS-PH1	8	PVC - SDR 35	336.06	0.30	3.36	2.35
SS-PJ1	8	PVC - SDR 35	182.10	0.79	3.03	1.59
SS-PJ2	8	PVC - SDR 35	213.21	0.30	3.72	3.08
SS-PJ3	8	PVC - SDR 35	33.89	0.30	3.87	3.77
SS-PJ4	8	PVC - SDR 35	332.04	0.40	5.25	3.92
SS-PK1	8	PVC - SDR 35	106.95	1.34	5.42	3.77



SEWER PLAN SHEETS

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- 22 - SANITARY SEWER PLAN A
- 23 - SANITARY SEWER PLAN B
- 24 - SANITARY SEWER PROFILES 1
- 25 - SANITARY SEWER PROFILES 2
- 26 - SANITARY SEWER DETAILS 1
- 27 - SANITARY SEWER DETAILS 2
- 28 - PUMP STATION SITE PLAN
- 29 - PUMP STATION DETAILS 1
- 30 - PUMP STATION DETAILS 2
- E-1 - E-12 - PUMP STATION ELECTRICAL PLANS



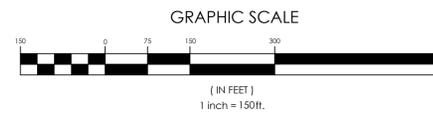
VICINITY MAP
SCALE: 1" = 2,000'

SITE DATA:

- OWNER: WAYNE E. & GARY O. HICKMAN & CINDA S. RICKARDS, TRUSTEES
3443 CENTRAL AVENUE
FRANKFORD, DE 19945
- DEVELOPER: K. HOVNANIAN AT LILYVALE, LLC
2499 SOUTH DUPONT BLVD., SUITE 6
SMYRNA, DE 19977
CONTACT: MIKE IRONS
- ENGINEER: SOLUTIONS IPEM, LLC
303 NORTH BEDFORD STREET
GEORGETOWN, DE 19947
302.297.9215
CONTACT: JIM ERIKSEN, PE
- TAX MAP 134-19.00, PARCELS 13.00 & 13.04
- EXISTING ZONING: AR-1
- PROPOSED ZONING: MEDIUM RESIDENTIAL (MR) WITH A CONDITIONAL USE
- TYPE OF UNIT TOTALS
DUPLICES (MAX. 3 BEDROOMS) = 2
TOWNHOUSES (MAX. 3 BEDROOMS) = 172
- BOUNDARY AND TOPOGRAPHY AS SHOWN HEREON ARE AS PROVIDED BY SOLUTIONS IPEM LLC
- FLOOD ZONE:
PROPERTY IS LOCATED IN ZONE AE, EL 4 - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD, BASE FLOOD ELEVATION DETERMINED; ZONE X (SHADED) - AREAS OF 0.2% ANNUAL CHANCE FLOOD; AND ZONE X (UNSHADED) - AREAS DETERMINED TO OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FIRM MAP NUMBER 10005C0495K & 10005C0513K, MAPS REVISED MARCH 16, 2015
- WATER SUPPLY:
TIDEWATER UTILITIES
- SANITARY SEWER:
SUSSEX COUNTY
- PROJECT DATUM:
HORIZONTAL: DELAWARE STATE PLANE NAD 83
VERTICAL: NAVD 88

NOTES:

- ALL GRAVITY-FED SANITARY SEWER PIPES WITH A DEPTH LESS THAN 12' SHALL BE SDR-35. ALL GRAVITY-FED SANITARY SEWER PIPES WITH A DEPTH GREATER THAN 12' SHALL BE SDR-26.
- ALL FITTINGS FOR GRAVITY-FED SANITARY SEWER PIPES SHALL BE SDR-26.
- THE TOTAL NUMBER OF LATERALS ASSOCIATED WITH THESE PLANS IS 179 (INCLUDING CLUBHOUSE, AND OFFSITE CONNECTIONS/STUBS).



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Salisbury, MD 21804
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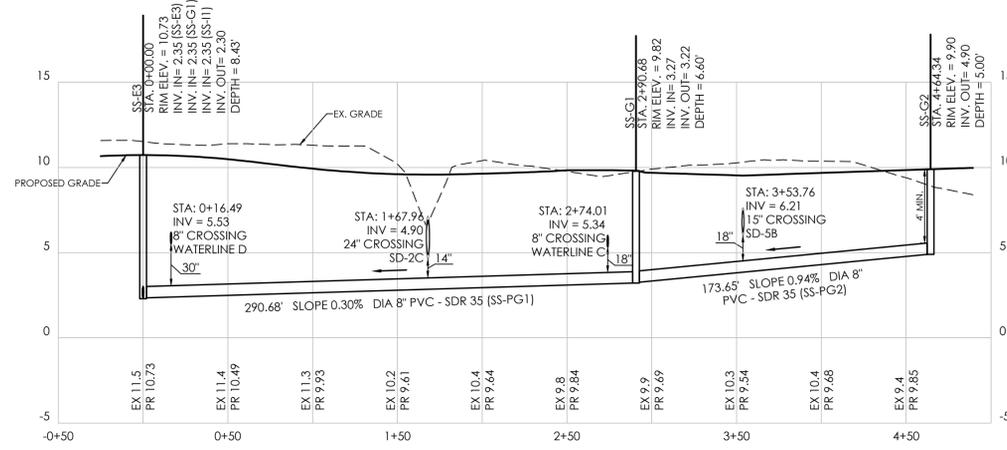
JAMES A. ERIKSEN
LICENSE
Professional Engineer
No. 17403
Date 2/26/26

REVISIONS	
NO.	DESCRIPTION
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5	REVISIONS PER TUI COMMENTS
6	REVISIONS PER SCE COMMENTS
7	REVISIONS PER TUI COMMENTS
8	REVISIONS PER FIRE MARSHAL COMMENTS
9	REVISIONS PER SCD COMMENTS

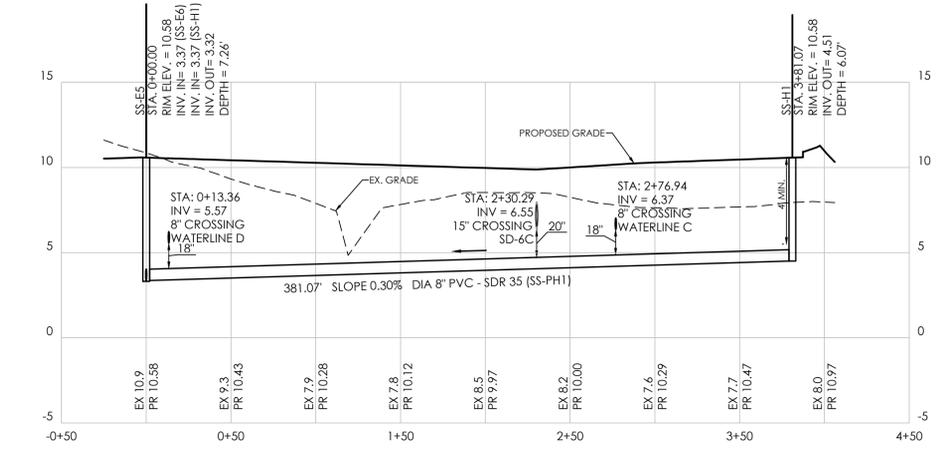
SANITARY SEWER INDEX for
LILYVALE
SUSSEX COUNTY, DELAWARE
Prepared for: K. HOVNANIAN AT LILYVALE, LLC

Date:	7/17/2025
Job Number:	G25008
Scale:	AS NOTED
Drawn By:	JPR
Designed By:	JPR
Approved By:	JRE

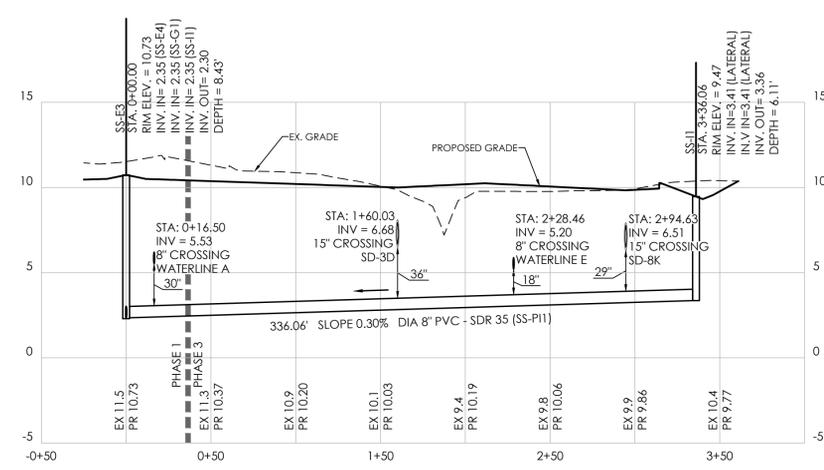
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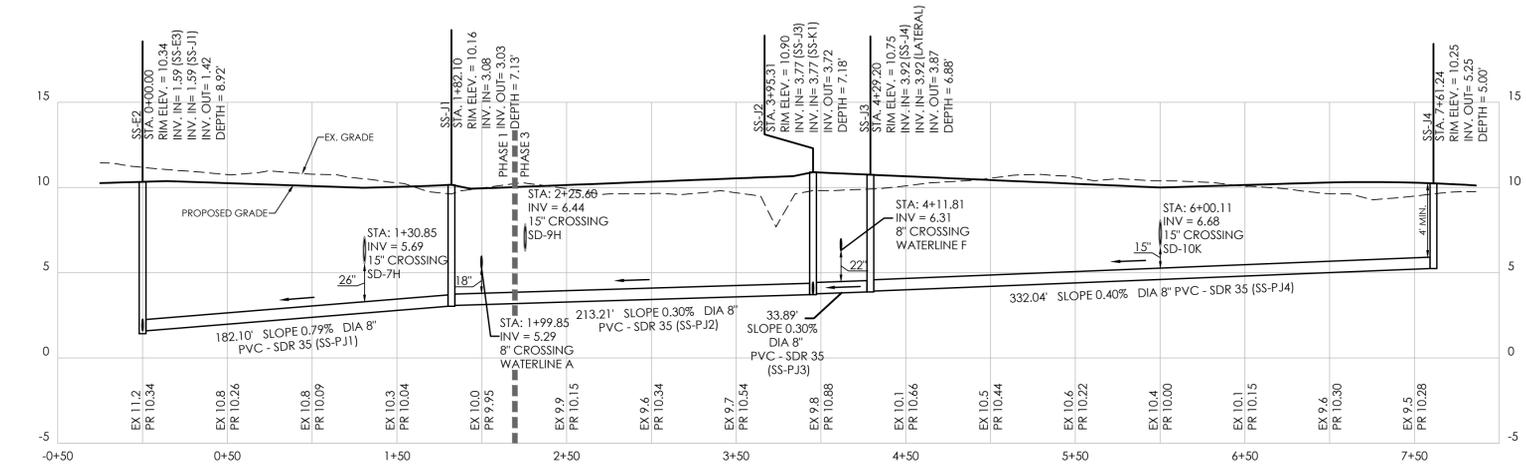
SS-E3 TO SS-G2
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=5'



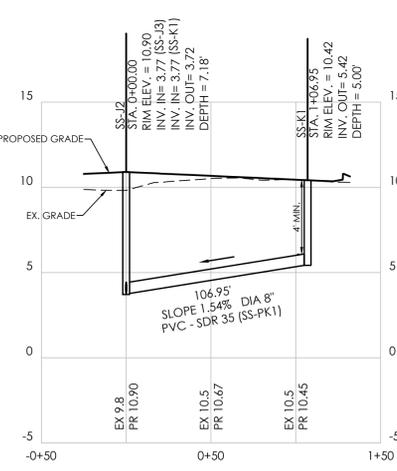
SS-E5 TO SS-H1
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=5'



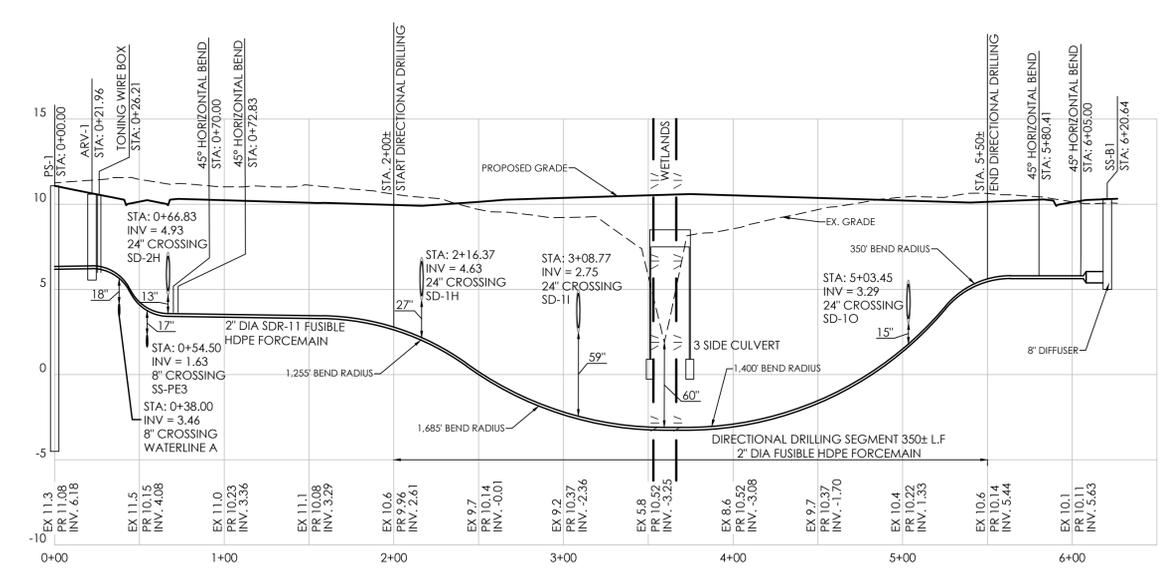
SS-E3 TO SS-I1
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=5'



SS-E2 TO SS-J4
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=5'



SS-J2 TO SS-K1
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=5'



FORCE MAIN
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=5'

NOTES:

1. THE SANITARY SEWER SHALL CONFORM TO THE SUSSEX COUNTY STANDARDS AND SPECIFICATIONS FOR SEWER DETAILS.
2. ALL GRAVITY-FED SANITARY SEWER PIPES WITH A DEPTH LESS THAN 12' SHALL BE SDR-35. ALL GRAVITY-FED SANITARY SEWER PIPES WITH A DEPTH GREATER THAN 12' SHALL BE SDR-26.
3. ALL FITTINGS FOR GRAVITY-FED SANITARY SEWER PIPES SHALL BE SDR-26.
4. SEWERS CROSSING WATER MAINS SHALL BE LAID OUT TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THE CROSSING SHALL BE ARRANGED SO THE SEWER JOINTS WILL BE EQUIDISTANT, AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS. CONCRETE ENCASEMENT SHALL BE REQUIRED WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION.

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 Salisbury, MD 21804
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JAMES A. BRINER
 LICENSE
 PROFESSIONAL ENGINEER

Date: 2/26/26

NO.	DATE	DESCRIPTION
4	1/21/26	REVISIONS PER SCD COMMENTS
5	1/23/26	REVISIONS PER TUI COMMENTS
6	2/4/26	REVISIONS PER SCE COMMENTS
7	2/9/26	REVISIONS PER TUI COMMENTS
8	2/13/26	REVISIONS PER FIRE MARSHAL COMMENTS
9	2/26/26	REVISIONS PER SCD COMMENTS

SANITARY SEWER PROFILES 2

for
LILYVALE

SUSSEX COUNTY, DELAWARE

Prepared for: K. HOVNANIAN AT LILYVALE, LLC

Date:	7/17/2025
Job Number:	G25008
Scale:	1"=50' (H), 1"=5' (V)
Drawn By:	JPR
Designed By:	JPR
Approved By:	JRE

Sheet No.: **25**

File Name:
 G25008-Sanitary Sewer Profiles

